

## **Water Conservation Committee Recommendation**

### **Increasing Water Efficiency and Conservation Practices in the Agriculture Industry**

**Synopsis:** Sustainability of water resources is important for the future of agriculture. The Agricultural Sector has experienced a clear expansion of new water withdrawals since initiation of the registration requirement in Michigan law. There has also been an increasing trend in irrigated acres since the 1960s, resulting in increased production of agricultural products. Improved technology has also allowed increased irrigation efficiency. New state policy focused on achieving a carbon-neutral footprint by 2050 also presents opportunities to further integrate energy efficiency practices which inextricably tied to water conservation and efficiency of use for agriculture and agribusiness.

Water conservation and efficiency practices are expected to increase in importance to major water sectors and these may be part of the solutions considered by Water User Committees (WUCs) in developing realistic shared solutions to sustainably manage water. Based on water use trends and the prominence of agricultural irrigation, water conservation and efficiency practices may play a larger role in water management and potential future Water User Committee actions.

The Michigan Commission of Agriculture and Rural Development has developed through research, a comprehensive guidance in the form of Generally Accepted Agricultural and Management Practices (GAAMPs) for Irrigation Water Use, which includes guidance for proper irrigation system management and water resource stewardship. Irrigation GAAMPs are a tool that started the education process about water efficiency and conservation practices. Additional tools and programs are needed to assist the agricultural industry holistically in optimizing its water efficiency. Optimizing efficient use of water within the agricultural industry may also provide water quality benefits by reducing nutrient loss.

**Recommended Action:** The Water Conservation Committee recommends that additional focus be placed on conservation and efficiency education and training in the Agricultural Industry. To accomplish this, MDARD, EGLE, along with Michigan State University Extension (MSUE) should develop and implement a strategy with clear objectives to expand training and outreach to each Agriculture Industry sector to improve water efficiency, and where possible, provide water quality benefits. This new initiative should include a systematic approach to water efficiency and conservation education and training for both plant and animal agriculture industries that can transition to a long-term institutionalized program.

**Implementing Organization:** Michigan Commission of Agriculture and Rural Development, MDARD, EGLE and MSUE

**Cost Analysis:** Michigan State University and Purdue Extension jointly support an irrigation educator who holds workshops for and works directly with producers in both Indiana and Michigan. Adding two (2) additional FTE positions to this team to develop and launch the initiative into a program that can be institutionalized into a long-term program over a three-year period is \$80,000-\$100,000 per position annually. This cost covers the position salary, benefits, and a small operating stipend. For FY 2021-2023 the ask is for \$200,000 annually.

**Timeframe:** A three-year timeframe is needed to develop, initiate, implement, and evaluate the program. After this initial three-year period, it is expected that the positions become institutionalized for continued success.

**Legislative changes:** None